

THROW LIGHT ON POTATO GROWING

Information Regarding One of
America's Largest and Most
Distinctive Crops.

MANY QUESTIONS ARE ASKED

Bureau of Plant Industry Has Con-
ducted Series of Experiments in
Tuber Growth of Much Inter-
est to Growers.

(Prepared by the United States Department
of Agriculture.)

How do potatoes grow?
Why do some vines produce many
tubers and others only a few?
Do big pieces produce better po-
tatoes than small pieces?
When does the tuber begin to form?
When does moisture have the most
effect on the production of potatoes?
What is the relation of soil to potato
production?

Experiments Conducted.

These are a few among many ques-
tions which have been asked about the
growth and yield of America's largest
and most distinctive crops, and which
former observers have been able to
answer only incompletely. The bureau
of plant industry, United States De-
partment of Agriculture, has con-
ducted a series of experiments in po-
tato growth, the results of which are
published in department Bulletin
958, Development of Tubers in the
Potato, which has just been issued.
The information contained is of in-
terest not only to the plant physi-
ologist but also to the practical grower,
as a knowledge of the relation of the
setting and subsequent development
of tubers of the potato may, to a
certain extent, be put to practical use.

Tuber formation, it was found, be-
gins in general at about the end of
the period of flower bud development,
although this is not in all cases an
exact criterion. Experiments showed
that the number, as well as the size,
of potatoes in a hill increased for
several weeks after the first potatoes
were large enough to dig. A small
increase in the weight of tubers was
found to occur even after the vines
had been killed by frost. The maxi-
mum rate of growth of the tubers was
found to occur about the last of Au-
gust or first of September, which was
approximately 80 days after planting.

An interesting development of the
experiments was that the number and
weight of tubers per hill were found
to be influenced by the size and the
kind of seed planted. Whole potatoes
used as seed yielded heavier than
half potatoes, and these more than
quarters, and the larger the seed
piece the greater the yield per hill. A
whole potato used as seed yielded
more than a half or quarter potato
of equal weight.

The experiments showed that appar-
ently light soils are better for po-
tatoes than heavy soils. The lowest
production of tubers, with respect to



Harvesting Potatoes.

both number and weight per hill, was
on the heaviest soil; the highest num-
bers and yields were produced on the
lightest soil. The department thinks
it possible, however, that these results
might be modified somewhat under
different climate conditions.

Resulted in Increase.

Two-year tests with irrigation indi-
cate that the early application of wa-
ter before tuber formation had start-
ed resulted in an increase in the num-
ber of tubers, as well as in the weight
per hill. Late irrigation actually in-
creased the weight but made little
difference in the number of tubers per
hill. The irrigation experiments were
not carried to a final conclusion, but
indicate that each application of wa-
ter at almost any period in the growth
of the plant, provided excessive quan-
tities are not used, may be expected
to produce an increase in the weight
of the crop, but that little or no in-
crease in the number of tubers is like-
ly to result from irrigation after tuber
formation is well started.

The bulletin contains an interesting
description of the tuber-bearing parts
of potatoes and their method of
growth. It may be obtained free on
request to the division of publica-
tions, United States Department of
Agriculture.

First Son Dog playing golf, to part-
ner—"That's six you had." Second
Ditto—"Tain't; it's five!" I had to go
astern in that bunker—then I had one
see shot hard apart—another on the star-
board tack, an' finally about ship, so
's five."—London Opinion.

FRETTING NAUGHT BUT FOLLY

But Many Sermons on the Subject
Have Failed to Convince People
of Its Uselessness.

In that doleful, delightful book, "The
Education of Henry Adams," occurs a
phrase, "the folly of fret," which is
better than the usual expression, "the
uselessness of worry."

Many sermons have been preached,
many lectures delivered, many medical
opinions pronounced, many household
homilies uttered, on that theme.
The trend of applied science in our
century is toward the reduction of
friction and the elimination of waste.

And a big part of friction and of
waste is worry.

We worry about the human machine.
We imagine that all sorts of dreadful
things are about to happen to us. Our
thoughts ought to be on our work—and
they are diverted by our worries.

We worry about losing a position in
business or our standing in society.
There would be less excuse for anxiety
if we would spend the energy con-
sumed in trying to do our work still
better, trying to serve more satisfac-
torily the community we live in, striv-
ing to discharge the various and deli-
cate offices of friendship with in-
creased tact and perception and sym-
pathetic selflessness.

Worry is quite another matter from
a proper carefulness, that weighs a
proposition and looks all round its ob-
ject ere acceptance.

A man who investigates before he
buys, who considers alternatives and
who asks questions before deciding,
who makes no leap in the dark, is not
open to the reproach of one whose
"folly of fret" merely leads him in
frantic circles, like a tethered donkey.

All his fuss and clamor issue in nothing
but an ecstasy of motion and emo-
tion.

Man power is too precious to be
thrown away in these gyrations that
are the pantomime of futility.

Give us more of the calm, big men
who plan and then proceed.

They seem to have time. They do
not operate in a flutter and a fever
resembling the hen yard or the stock
pen. They make up their minds and
preserve their equanimity. Seeing
them so cool and controlled, those who
do everything in a panic or a paroxysm
try their best to excite them by tell-
ing them the house is burning down
or the world is coming to an end.

But these quiet and capable ones
are not deceived. They know that it
is not for man to say when his own
life or his own work shall end. In
trust and peace they continue on their
way—avoiding "the folly of fret" that
victimizes and weakens other men.—
Philadelphia Public Ledger.

Relics of an Extinct Race.

Relics of an extinct Indian race are
being uncovered on the Santa Ynez
river by a road construction gang un-
der the direction of Ranger R. For-
sythe of the Santa Barbara national
forest. The discovery is at a point
two miles upstream from the foot of
the grade of the San Marcos road on
the other side of the mountain.

One such relic brought in to Forest
Supervisor Thomas B. Sloan's office
was a matter of much speculation. It
appears to be a piece of black soap-
stone in the shape of a cylinder about
1 1/2 inches in diameter and four
inches long, with a half-inch hole
the length of it. The relic is highly
polished, and when first excavated was
said to be of a softness that permitted
scarring its surface. Exposure to the
air evidently had hardened it, how-
ever, in a few hours.

Forsythe said two other relics sim-
ilar to this one have been uncovered,
and one of the bones of the forearm of
a man also has been found.—Santa
Barbara Press.

Some Exceptions.

Among the witnesses called in a
trial in a southern court was an old
clerk.

"Do you swear that what you tell
shall be the truth, the whole truth and
nothing but the truth?" Intoned the
clerk.

"Well, sah," returned the witness,
shifting uneasily, "dis lawyer gen-
man kin make it a pow'ful lot easier
on hisself an' relieve me of a mighty
big strain of he'll leave out anything
about gin an' chickens, 'cepting 't
dose. Ah guess Ah kin stick to de
truth."—The American Legion Week-
ly.

No Joke.

Ex-Chancellor Day of Syracuse uni-
versity, bewailing the high price of
books, clothes and what-not, said at
a dinner:

"Will this thing never end? I
heard a story the other day. A chari-
table lady on a seashore boardwalk
dropped a nickel in a beggar's hat.
But the beggar returned the nickel to
her, saying in not unkindly tones:
'Excuse me, lady; I don't want to
hurt your feelin's, but I'll have to
return this here nickel back to you.
If we take less than a dime we lose
our union card.'"

Mansfield Uses Phonographs.
Appreciation of music is taught in
the schools of Mansfield, Ohio, with
the help of phonograph records. In
the seven schools of the town there
are 37 phonographs. The machines
were paid for by the pupils' music
club, which includes 600 boys and
girls. Each school has a complete li-
brary of records and the phonographs
and records represent an investment
of more than \$5,000. A special text-
book in music appreciation guides the
teachers in this work, and the music
supervisor of the town schools consid-
ers the teaching successful.

Work's Chief Object.

The chief object in work is not to
get more, but to be more. The build-
ing of a fine character is more credit
to a man than the building of a pros-
perous business.—Exchange.

The Story of Our States

By JONATHAN BRACE
XLVIII.—TERRITORIES



"THE Story of our States" would not be complete without a brief mention of the other terri-
tory of the United States, which is
not included in the actual forty-
eight states. The largest of these
territories is Alaska, with an area
of 580,884 square miles. This huge
region was under Russian domina-
tion until 1867 when the United States
purchased it for \$7,200,000, or less than
two cents an acre. There was some
grumbling at the time by a few con-
gressmen over "adding a refrigerator
to the United States." But the refrig-
erator has been found to be well stock-
ed with gold, coal, forests and fish-
eries, so that Alaska has proven a
profitable investment.

Hawaii, like Alaska, is a regu-
lar territory. In 1893 there was a
successful revolution against the
provisional government was formed
under American protection. In 1898,
at the request of the population, Hawaii
was annexed to the United States.

Porto Rico, Guam and the Philip-
pines were ceded to the United States
in 1898 as a result of the Spanish-
American war. Porto Rico and the
Philippines are dependencies and not
territories. Their local affairs are ad-
ministered by a legislature of two
houses and they are represented in
the United States by resident com-
missioners elected by the legisla-
tures. Guam is under the control of
naval officers in command of naval
stations. Under similar naval control
are the Tutuila group and Samoa,
which were ceded in 1899 by Great
Britain and Germany.

Then there is the Panama Canal
Zone, which was purchased from
Panama in 1904 for \$10,000,000.
This is governed by the Isthmian
Canal commission.

The year 1917 saw the purchase
from Denmark of the Virgin Islands,
for \$25,000,000. These aggregate only
150 square miles and are temporarily
governed by a naval officer.

Finally, there is the District of
Columbia, which was organized in
1791, as the seat of our federal gov-
ernment. The residents have no vote
for either local or national officials,
nor are they represented in con-
gress.

RIVERDALE

L. Hock and son who lost their
hardware store in the fire over a
week ago are occupying the Opera
House over Nunn and Loecky's store.

The Union Telephone Co. have in-
stalled a switch board in the Opera
House and are now ready for busi-
ness.

Mrs. Wm. Horton was the lucky
one who drew the quilt last Saturday
evening, given by the Riverdale
Cemetery Association.

Mrs. Carrie Tallon and the Mes-
srs. Ida and Leon Tallon and Mrs. Mary
Whitney of St. Louis spent Thurs-
day with Mrs. Wm. Bradley.

Mrs. Clair Mallory and son Horton,
spent last Wednesday in Alma, a
guest of her sister, Mrs. George
Shong.

Miss Beatrice Wiley spent the past
week with her grandparents, Mr. and
Mrs. Jerry Wolfgang, west of town.
L. A. Carmer has been quite ill the
past week.

Mr. and Mrs. Fred Leiter are visit-
ing relatives at Six Lakes and near
Orleans for a week or ten days.

Mr. and Mrs. Oliver Jacques and
children of Alma, were over Sunday
guests of Mr. and Mrs. John Jac-
ques.

Rev. and Mrs. H. R. Strong and
Mrs. E. M. Highfield spent last Wed-
nesday at the farm home of Mr. and
Mrs. E. Rockwell north of Elwell.

Mrs. Edgar Erskin has returned to
Lansing.

Harley Schnepf has returned home
from Lansing where he has been
working for the past two months.

Mrs. Jay Van Leuven spent the
week end with relatives near Vesta-
burg.

Mr. and Mrs. Chester Swarthout
entertained relatives from St. Louis
over Sunday.

Mrs. Langin of Shepherd spent the
week end with Mrs. Rose LaMay.

Mrs. Agnes Crawford of Brecken-
ridge spent Saturday evening and
Sunday with her daughter, Mrs.
Mildred Hopkins.

Mrs. Twila Bradley was in Mt.
Pleasant Saturday.

Jay Rice was home from Saginaw
over Sunday.

L. M. Forquer whose barber shop
was completely ruined in the River-
dale fire, is using the west side of
the R. E. Mohle store for a shop at
present and started doing business
in that place last Friday evening. Mr.
Forquer expects to build some time
this summer.

Mrs. Twila Bradley left Monday
morning to attend summer school at
Mt. Pleasant Normal.

Mr. and Mrs. Ralph Holcomb and
daughter, were Riverdale callers Sat-
urday.

Mr. and Mrs. B. Smith and child-
ren near New Haven called on friends
in town Saturday.

Prof. D. D. Snider and the pupils
of the high school spent a very en-
joyable time at Crystal Lake last
Tuesday.

Frank Rice was home for Dow-
agiac over Sunday.

Merle Forquer returned to Detroit
Saturday evening after spending a
week's vacation with his parents, Mr.
and Mrs. L. M. Forquer.

Mr. and Mrs. E. Stahl of St. Louis
were guests of Mr. and Mrs. Chester
Swarthout, Saturday evening.

Mr. and Mrs. Elmer Kilbourn of
Lakeland City spent several days last
week with Mr. and Mrs. S. D. Parks.
The children's day exercises were
held at the M. E. church Sunday
morning at 10 o'clock. A very fine
program was rendered.

Mr. and Mrs. Otis Hamp and
daughter, have returned from spend-
ing the past six months in Florida.
Allen Highfield was home from
Greenville Sunday.

Laurel Welch has accepted a posi-
tion in the Martin store at Alma.

Mr. and Mrs. James Schnepf and
children, were enjoying a weeks va-
cation at Houghton Lake.

Mrs. Carrie Williams, west of town
was a guest of Mrs. Glen Rose,
Thursday.

Adrian Britten returned last Mon-
day from Salt Creek, Wyo., where he
has been for the past three months.

Mrs. Stanley Scofield and children
north of town spent Saturday with
Mrs. Lewis Valance.

Chas. and Frank Rice and Robert
Bartlett are working in Dowagiac.

Quite a number from here attend-
ed the dance at Crystal Lake, Sat-
urday evening.

Hornace Johnson was home from
Clare over Sunday.

Millard Hopkins attended the gradu-
ating exercises at Alma College last
Thursday, his brother Clarence Hop-
kins being one of the graduates.

Mrs. Hewitt and children of Akron,
Mich., are guests of Mr. and Mrs.
Alfred Loecky.

Mr. and Mrs. Henry Lucas enter-
tained friends from Grand Rapids
over Sunday.

Mrs. Flossie Lucas and Owen
Welch spent Sunday at Crystal
Lake.

Mr. and Mrs. Glen Croton south
east of town, spent Sunday with
Mrs. Clara Nunn.

Mr. and Mrs. Carl Harry of Al-
ma were guests of Mr. and Mrs. Wm.
Hurry north-west of town Sunday.

The pupils of the 9th grade of the
Riverdale high school entertained the
1921, grade graduates at a very en-
joyable party at the home of Miss
Velma Going, south east of town
last Friday evening. Games were
played and light refreshments serv-
ed. Everyone reports a splendid
time.

The following are the graduates
for 1922: Violet Dan Buskirk; Velma
Welch, Winifred Croton, Treva
Welch, Mary VanAlstine, Mildred
Whitemore and Agnes Wiltshire.
The class motto is, "The End Crowns
the Work." Class colors are blue
and gold. Class flower, Pink and
red rosebuds.

Get a new desk blotter at the
Record office. Colors buff, blue and
green. Price 10.—Advertisement.

One's Own Week.

A busy mother with several children
keeps abreast of her many duties by
giving each child a week in turn. Out-
side of routine work, one week every-
thing is done for John—mending, mak-
ing and even some little things he
wants in his room. Next week is
Edith's. The next father's and so on.
During his particular week each one
tries to be very helpful, so as to get
more things done for him. The plan
works well in many ways.

Tribute to Poetry.

Poetry is simply the most delightful
and perfect form of utterance that
human words can reach. Its rhythm
and measure, elevated to a regularity,
certainty, and force very different from
that of the rhythm and measure which
can pervade prose, are a part of its
perfection. The more of genius that
a nation has for high poetry, the more
will the rhythm and measure which
its poetical utterance adopts be dis-
tinguished by adequacy and beauty.—
Matthew Arnold.

The Noblest Classic.

The translation of the Bible is the
remarkable and interesting event in
the history of translations; it is an il-
lustrous monument of the age, the
nation, the language; it is, properly
speaking, less a translation than an
original, having most of the merit of
the former as to style, and all the
merit of the latter as to thought; it
is the noblest, best, most finished clas-
sic of the English tongue.—T. S.
Grimké.

Uses for Turpentine.

Turpentine has many uses which the
housekeeper will appreciate. A little
of it in the suds on wash day lightens
the laundry labor, and a teaspoonful
to a quart of water, if applied to
plants once a week, will make the
leaves greener and cause the blossoms
to become brighter. It is a sure pre-
ventive against moths by just dropping
a trifle in the bottom of chests, draw-
ers and cupboards.

Queer Origin of Words.

Strange is the word squinter,
spring from La Sainte Terre (the
Holy Land), whither pilgrims were
wont leisurely to journey. Stranger
the word haberdasher, which is said
to have been derived from the German
habt ihr das nief? Another exotic cor-
ruption, this time from the French, is
qu'en dirai (what shall I say of it?)
for quandary.—Philadelphia Ledger.

Violin Superstitions.

There is no musical instrument
about which cling so many queer no-
tions and superstitions as the vi-
olin. One of the strangest is that held
by so many people that the tone of a
violin is often improved by its being
broken and then mended. It seems al-
most incredible, but that very idea is
believed by thousands of people.

Mince Pie.

Mince pie was discovered in 1590.
says an exchange. That's a long while
ago, and yet a lot of us have still to
learn that it isn't safe to eat it at
night.

Cherries are Ripe

We have a crop of sweet and sour CHERRIES, and later
will have PLUMS, PEACHES, PEARS AND APPLES.

Will fill parcel post or express orders and guarantee satis-
faction. SHELBY, Oceana County, is easily reached by
Truckers, and they are welcome.

We need cherry pickers and they can make good wages.

SHELBY-NEW ERA CO-OP. ASS'N.

O. E. HAWLEY, Mgr.

ON JANUARY 1st, 1922

40,268

AUTOMOBILES IN MICHIGAN, OUTSIDE OF
DETROIT, WERE INSURED IN
The CITIZENS' MUTUAL AUTOMOBILE
INSURANCE COMPANY,
OF HOWELL, MICHIGAN

Is Yours? The Cost is Small, The Protection Sure

ASSETS—\$137,392.51

Insurance against Fire and Theft, not exceeding \$1,000 and property
Damage and Personal Injury, not exceeding \$5,000 in the smaller
cities and in the country districts, would cost you on the cars listed
below as follows:

Ford touring	\$ 9.50	Columbia	\$10.50
Ford, Sedan, Coupe or Truck	10.50	Packard, 6	11.10
Dodge	10.50	Packard, 7 window	15.90
Dodge, 4	10.50	Dart	10.50
Dodge, 6	11.10	Durand	10.50
Reo, 6	10.50	Chevrolet	10.50
Olds, 6	10.50	Studebaker, Spc. 6	11.70
Olds, 8	10.80	Studebaker, Btc 6	15.80
Overland, 6	10.50	Willys-Knight	10.50
Overland	10.50	Hupp	10.50
Nash	10.50	Franklin	10.50
Valiant	11.70	Pontiac, 6-49	10.50
Exmot	10.50	Pontiac, 6-55	11.70
Cadillac, 8	12.50	Maxwell	10.50
Chevrolet	10.50	Chandler	11.70
Lincoln	13.80	Chalmers	10.50
Winton, 6	12.90	Willys-St. Clair	12.90

Other cars of similar horse power, same rates.

Additional Fire and Theft above the \$1,000 also written

Collision insurance protects your own car against damage arising
from a collision with moving traffic objects such as automobiles, rail-
road trains, street cars, etc. The rate is \$2.00 per \$100.00 of protec-
tion. The minimum amount of collision insurance that can be written
is shown in the following schedule:—

Cars costing not over (Present list prices)	Minimum Coverage	Cost
\$ 500—\$ 1,000	500	\$ 8.00
1,001—1,500	600	12.00
1,501—2,000	700	14.00
2,001—2,500	800	16.00
2,501—3,000	1,000	20.00
3,001—4,500	1,200	24.00
4,501—500	1,500	30.00

Additional coverage above the minimum at the same rate.

We also write collision insurance against damage arising from colli-
sion with stationary as well as moving objects. The rate \$5.00 per
\$100.00 protection with the same minimum schedule as above. 15,000
people killed; 150,000 liability claims. Why take chances? We have
over 100 agents in the state. If you cannot find one in your locality,
write or phone

WM. E. ROBB, Secretary, Howell, Michigan

See Local Agent, F. E. French, Alma, Mich.

A BUSINESS COUPE OF STEEL

Dodge Brothers offer to the business public of America
an entirely new principle in Coupe body construction.

From framework to window mouldings the body is built
of steel. It is the first all-steel closed car ever marketed.
This design anticipates every possible requirement of
commercial travel. It insures unusual quietness—
unusual grace—unusual stamina. It has made it possible
to give the Coupe that same lustrous baked-on enamel
finish for which Dodge Brothers open cars have long
been famous.

The upholstery is of genuine leather—leather that will
wash and wear. The seat is wide and comfortable.
Carrying